

gardens having sufficient space. The tubers (either cut or whole) should be planted 3in. to 4in. deep and 15in. to 18in. apart in rows 3ft. apart. Three pounds of small tubers will plant about 100ft. of row.

Artichokes are very hardy and do not require any particular type of soil, though they do well in fertile, well-worked loams. They are rarely troubled by pests and diseases.

Leeks

Leeks are one of the most reliable vegetables for autumn, winter, and spring. Though they stand well in cool, moist conditions, they send up seed heads fairly quickly if subjected to dry, warm conditions. To ensure a long season of supply it is advisable to make two or three sowings. Their culture was fully discussed in the June "Journal".

Because of cool soil conditions the earliest sowings in most districts are best made in a box of prepared soil under glass. Seed can now be sown outdoors thinly ½in. deep in rows 12in. apart. London Flag or Broad Flag is a good variety for this sowing, as it matures a little more quickly than either Musselburgh or Lyon, though either of these can be sown if desired.

Onions

In the South Island and in districts where main-crop onions are usually sown in spring seed should be sown as soon as ground conditions are favourable. Though varieties and cultural practices have an important bearing on production, fairly heavy soils usually produce good-keeping but relatively slow-maturing onions and sandy soils quick-maturing onions that are generally of poorer keeping quality.

Organic matter does not have to be applied to soils that are reasonably fertile if the water-table is high and if the composition and placement of fertilisers are suitable. However, plant food should be readily available, but in such a form and in such quantities that it does not cause burning or, paradoxically, starvation.

Onion roots arise from the stem plate at the base of the fleshy part of the plant. They are fine, but very numerous, radiating in all directions and forming a fibrous tuft. On most soils the roots are not more than 10in. to 12in. long, though occasionally they may be 20in. They do not arise as normal plant roots, but continue to develop from the stem plate as long as the plant is growing. The main root zone is usually within 6in. of the bulb.

Onions require a slowly available source of nitrogen, and on most soils crops will benefit from a heavy dressing of stable or farmyard manure applied in autumn and to which has been added (to balance its nitrogen and potash content) about 1/30 part by weight of superphosphate. If

onions of good keeping quality are required, it is not advisable to apply in spring excessive quantities of organic manure which contain a considerable amount of nitrogen, as bulbs may be stimulated into excessive leaf growth and weeds are liable to be troublesome.

Few home gardeners are likely to have much farm-yard manure, but available compost should be applied with a complete fertiliser at about 3oz. to 6oz. a square yard. Because of the great variation in soils and their condition throughout New Zealand only local experience can indicate fertiliser requirements. If soil conditions and fertiliser placement are correct, it seems difficult, judging by experiments made, to over-manure onions.

The seed-bed should be worked down to a fine, firm tilth and seed sown thinly ½in. deep in rows 12in. to 15in. apart.

Good varieties include Ailsa Craig and Straw Spanish (both early) and Pukekohe Long Keeper (for storage).

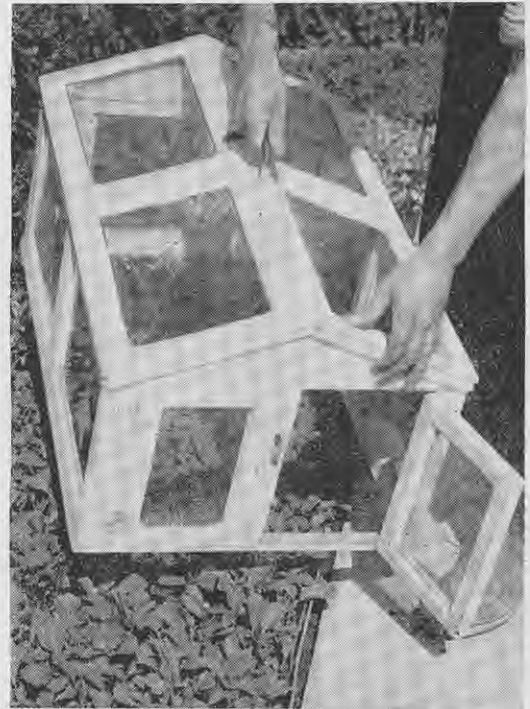
Peas

In gardens where peas have not yet been sown they should be put in without delay if soil conditions are favourable. Each pea crop can be harvested for only a limited time and successive sowings are usually advisable.

Peas do well in cool, well-drained soils rich in humus. As they repay good cultural methods, the ground should be deeply dug and manured, preferably some time before sowing, with organic material such as compost or farmyard manure. Before sowing, a complete fertiliser, or if the soil is in good condition a dressing of 2oz. to 3oz. of superphosphate to the square yard, can be well worked into the soil.

If a shallow trench is first taken out and the seed pressed into the bottom of it 1in. to 1½in. deep (according to whether the soil is heavy or light), the plants can be earthed up conveniently as soon as they show a tendency to straggle or fall over between the rows. Dwarf varieties such as William Massey and Little Marvel can be grown without staking in rows 20in. apart, if they are kept well earthed up.

Rows of the mid-season varieties such as Greenfeast and Victory Freezer should be planted at least 3ft. apart and require staking. Material such as brushwood, netting, or sticks



[Green and Hahn
Miniature glasshouse type of cloche.

can be used. Vines must be supported so that they will not provide a refuge for slugs, which eat the pods. Staking also prevents the pods from rotting through contact with the soil. The varieties mentioned are among the best. One pound of pea seed is sufficient for about 100ft. of row.

If slugs are troublesome, they can be controlled by parametalddehyde baits, obtainable from most seedsmen.

Potatoes

It is too early in most districts to plant main-crop potatoes, though an early planting can be made if the home gardener is prepared to keep the tops earthed up while frosts are likely to cause damage. It is not necessary to green and sprout tubers before planting, but earlier crops can usually be obtained from sprouted seed.

Government-certified seed should be used if possible. Few vegetables are subject to as many diseases as potatoes, and only the expert can recognise many diseases in the tubers. Tubers infected with virus diseases, such as leaf roll, mosaic, and crinkle, may appear healthy and of a desirable type, yet if it were not for the system of certification, these diseases would reduce the total yield of potatoes in New Zealand by perhaps a half or two-thirds. Virus diseases are transmitted mainly by aphids (green fly),